REMARKS

In this Amendment, claim 1 has been amended to incorporate the subject matter of claim 7 and also recite --a copolymer content of 10%-35%--. These amendments are supported by, for example, original claim 7. Claim 7 has accordingly, been cancelled.

Claim 1 has also been amended to replace "A method for producing electrical cables coated with" with --A method for producing electrical cables comprising an electrical conductor coated with--. This amendment is supported by EP 00402121.8, which is incorporated by reference at the top of page 1 in the specification, wherein the German word "Leitungsdrähten" meaning "conductor" is used. See MPEP 2163.07II, which states that the prohibition against relying on the disclosure of a foreign priority document to support correction of an error does not apply where the U.S. application explicitly incorporates the foreign priority document by reference.

Claims 1, 5, 6 and 8 have been amended to replace "electrical cable" with --electrical conductor--. As described above, this amendment is supported by EP 00402121.8.

Claim 9 has been cancelled.

No new matter has been added and thus, entry of the Amendment is respectfully submitted to be proper. Upon entry of the Amendment, claims 1-6 and 8 will be all the claims pending in the application.

Before address the merits of each reference, Applicants provide the following explanation of the present invention.

Cable workers, who produce high voltage cables use either compounds based on ethylene homopolymer **or** ethylene copolymer. There is no cable company which produces cables by the

steps of producing a mixture of ethylene homopolymer and ethylene copolymer, placing this mixture into an extruder and extruding this mixture onto the conducting wire.

In contrast to general practice, the present invention uses a mixture of ethylene homopolymer **and** an ethylene-acrylate copolymer, among which ethylene butyl acrylate, ethylene ethyl acrylate and ethylene methyl acrylate are preferred. Mixing (and grafting) of the ethylene homopolymers and the specific ethylene-acrylate copolymers are new and involve an inventive step.

The method in which the claimed mixture is used leads to less expensive manufacture of cables. Further, the cable produced according to the present invention has improved resistance against water-treeing.

The copolymer used in the present invention is produced by polymerizing ethylene with acrylate. The amount of acrylate in the copolymer is named in the language of the cable workers the amount of copolymer in the ethylene copolymer, although this may be scientifically incorrect.

In the present invention, an electrical cable comprises a conductor, an insulated layer and a cable sheath. Additionally, there may be, in the case of a high voltage cable, a semiconducting layer on the conductor, a second semiconducting layer on the insulating layer and a metal armouring underneath the cable sheath.

There are two ways to practice the present invention according to claim 1:

1. the two-step method as specified in Example 1 and claim 6, and
2. the one-step method as specified in Example 2 and claim 8.

On page 2 of the Office Action, claim 9 has been rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite.

Applicants respectfully submit that the rejection is moot, because in this Amendment, Applicants have cancelled claim 9. Accordingly, the rejection should be withdrawn.

On page 2 of the Office Action, claims 1-5, 8 and 9 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Glander et al (U.S. Pat. No. 4,289,860) in view of Furrer et al (U.S. Pat. No. 5,112,919).

Applicants respectfully submit that claims 1-5 and 8 as amended are not *prima facie* obvious over Glander et al in view of Furrer et al. In this Amendment, Applicants have amended claim 1 to incorporate the subject matter of claim 7, which is not included in the rejection.

Glander et al discloses that EPDM or EPM can be added to the polymer in an amount of 5-20 parts based on 100 parts of polymer. The purposes are to increase the melting viscosity and to reduce bubble formation. Although this mixture may lead to a copolymer content of 1 to 8% in the insulating layer, this material (EPM or EPDM) is not suitable to improve water-treeing in the insulating layer.

Glander et al does not disclose ethylene copolymers containing acrylates.

Furrer et al discloses that the base polymer may be either a homopolymer **or** a copolymer. However, Furrer et al does not disclose a mixture of a homopolymer **and** a copolymer.

Accordingly, even if there might be motivation to combine Glander et al and Furrer et al, the combination would not result in the present invention. That is, the present invention is not obvious over Glander et al in view of Furrer et al.

In view of the above, the Examiner is respectfully requested to reconsider and withdraw the rejection.

On page 4 of the Office Action, claims 1-5, 8 and 9 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Furrer et al.

Applicants respectfully submit that claims 1-5 and 8 as amended are not *prima facie* obvious over Furrer et al.

As described above, Furrer et al does not disclose a mixture of a homopolymer **and** a copolymer, as presently claimed. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

On page 4 of the Office Action, claims 1-9 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Nishiyama et al (JP 04293945) in view of Furrer et al.

Applicants respectfully submit that the claims as amended are not obvious over Nishiyama et al in view of Furrer et al.

Nishiyama et al discloses a composition for **semiconducting** layers, which are not insulating layers as claimed in the present invention. The composition of Nishiyama et al is produced by mixing and kneading 60-95 pts wt of polyethylene, 5-40 pts wt of one more ethylene copolymers selected from, *inter alia*, ethylene-ethyl acrylate copolymer and ethylene

methyl acrylate copolymer, 15-80 pts wt of carbon black and an organosilane compound with 0.05-50 pts wt of peroxide and 0.01-3.0 pts wt of a silanol condensation catalyst.

However, Nishiyama et al does not disclose or suggest that the ethylene homopolymer and the ethylene copolymer are granulates.

Further, the composition of Nishiyama et al is not suitable to improve water-treeing in an insulating layer on the conductor of a power cable.

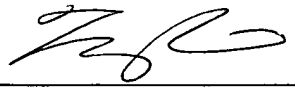
Furrer et al does not disclose a mixture of a homopolymer **and** a copolymer, as presently claimed.

Accordingly, the present invention is not obvious over Nishiyama et al in view of Furrer et al, and the rejection should be withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 7 and 9 are canceled.

The claims are amended as follows:

1. (Thrice Amended) A method for producing electrical cables comprising an electric conductor coated with an insulating layer of cross-linked polyethylene, in which a polyethylene granulate is mixed with a liquid silane-containing cross-linking agent, the granulate mixture thus prepared is melted in an extruder and extruded onto the electrical ~~cable~~ conductor, and the extruded coating is cross-linked in the presence of water or steam, wherein said polyethylene granulate comprises a polyethylene homopolymer and a copolymer of ethylene which is an ethylene butyl acrylate (EBA), an ethylene ethyl acrylate (EEA) or an ethylene methyl acrylate (EMA) each with a copolymer content of 10% - 35%, and wherein the copolymer content in the insulating coating on the cable is between 1 and 8% by weight.

5. (Twice Amended) A method as claimed in claim 4, wherein the regranulate provided with a catalyst or a catalyst batch is introduced into an extruder, extruded onto the electrical ~~cable~~ conductor, and the coating extruded onto the electrical ~~cable~~ conductor is cross-linked in the presence of water or steam.

6. (Thrice Amended) A method as claimed in claim 4, wherein the granular polyethylene homopolymer material alone is coated with the liquid cross-linking agent in a compounding system, melted, grafted, homogenized and subsequently regranulated, and the regranulate and a granular copolymer of ethylene, and a catalyst, are placed into an extruder,

where the mixture is melted, homogenized and extruded onto the electrical ~~cable~~ conductor and cross-linked.

8. (Twice Amended) A method as claimed in claim 1, wherein a granular material of polyethylene homopolymer and copolymer of ethylene is placed into an extruder, a liquid mixture of silane, peroxide and possibly a stabilizer as well as a catalyst or a highly concentrated catalyst batch is likewise placed into the extruder, and the mixture is melted, grafted and homogenized in the extruder, and the grafted, homogenized material is extruded onto the electrical ~~cable~~ conductor and cross-linked in the presence of water or steam.